



Alignment of the Performance Assessment for School Leaders to the Professional Standards for Educational Leaders: A Distance-Based Approach

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RESEARCH REPORT

Alignment of the Performance Assessment for School Leaders to the Professional Standards for Educational Leaders: A Distance-Based Approach

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We conducted a distance-based alignment study for the Performance Assessment for School Leaders (PASL). PASL is a multiple-task portfolio assessment that requires candidates to submit contextual information, written responses, and artifacts (e.g., student work) to provide evidence of the completion of the task requirements. This alignment study supports the content validity of the PASL by providing evidence from external judges indicating that the assessment measures the knowledge and skills outlined in the Professional Standards for Educational Leaders (PSEL). This research report also documents the distance-based methods that were used to complete the alignment study. An expert panel of eight educators provided judgments indicating the alignment between the PASL and the PSEL. Panelists were provided with preparatory information about the assessment and the standards before attending a webinar that provided more detailed information about the PASL. Training was provided via recorded presentations, and panelists used an online survey to complete their alignment judgments independently. Panelists then completed final evaluations using an online survey. The panel judged that the PASL measures all 10 PSEL standards and 61% of the supporting elements.

Keywords performance assessment; educational leadership; distance-based alignment; portfolio assessment; PSEL standards

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Licensure assessments are intended to be mechanisms that provide the public with evidence that candidates passing the assessment and entering the field have demonstrated a particular level of knowledge and skill (American Educational Research Association [AERA], American Psychological Association [APA], & National Council on Measurement in Education [NCME], 2014). For licensure assessments, scores are used in part to award or deny a license to practice. Therefore alignment studies, which evaluate the degree to which an assessment measures a set of standards, are important to support the content validity of the test use and claims (Davis-Becker & Buckendahl, 2013; Martone & Sireci, 2009). The purpose of this study was to document the alignment of the Performance Assessment for School Leaders (PASL) to the Professional Standards for Educational Leaders (PSEL), created by the National Policy Board for Educational Administration (NPBEA, 2015).

This alignment study provides evidence supporting the content validity of the test. This was accomplished by having external experts independently judge which tasks of the PASL they believed measure the standards and elements of the PSEL. Specifically, their input provides support for the research question, to what degree is the PASL measuring the PSEL? Addressing this question provides validity evidence in that it documents the relationship between the content measured on the assessment and the content described in the PSEL (AERA, APA, & NCME, 2014). Although the test was designed to measure a sample of the content described in the standards, an alignment study provides external evidence supporting this claim (that the test measures the relevant content for the job, which is described in the standards).

In addition to supporting the content validity of the assessment, the distance-based methods used in this study present a different way of approaching alignment studies for licensure assessments. This assessment is uniquely structured in that, as a performance assessment, candidates responding to the same prompts will generate a variety of appropriate responses. Because of the type of assessment, all test prompts are posted publicly on the website for Educational Testing Service (ETS, 2017), allowing us to conduct this study via distance-based means without concern about exposing secure test material.

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Overview of the Performance Assessment for School Leaders

The PASL is a multiple-task, evidence-based performance assessment designed by ETS to assess school leader candidates (training to become principals or assistant principals, for example) during their clinical experience prior to receiving a license. This assessment evaluates school leader candidates on their ability to have an effect on instructional practice and student learning as measured by the three PASL tasks (ETS, 2018):

- *Task 1*: Problem solving in the field
- Task 2: Supporting continuous professional development
- *Task 3*: Creating a collaborative team

The tasks require written responses, supporting instructional materials, and artifacts (e.g., student work). Task 3 also requires a video of the candidate's interaction with colleagues. Detailed information and task requirements are described on the ETS website. All of the test materials (e.g., prompts and rubrics) are publicly accessible.

For each task, a candidate responds to four steps, which all relate to the overarching theme described in the task. The candidate's responses to each step are scored by at least two ETS-trained raters using a step-specific, 4-point rubric. The task scores are the sum of the step scores; as a result, the range of possible scores for each task (before weighting is applied) is 4-16 points. Candidates' score reports contain the scores for each task as well as the overall PASL score, which is the sum of the task scores. Task 3 has a weight of 2; therefore the range of scores a candidate can earn for the overall assessment is 16-64. The overall score is reported as the operational score, and the task scores are provided as additional feedback to the candidate.

Although the PASL provides a summative score, the test is designed to connect to learning activities in which candidates engage as they complete their clinical experiences. Responses to the task requirements incorporate the skills and abilities needed for school leaders. The PASL may be used for program completion or as a requirement for state licensure.

Overview of the Professional Standards for Educational Leaders

The NPBEA, a consortium of nine professional organizations, created the PSEL (NPBEA, 2015) to replace the 2008 Interstate School Leaders Licensure Consortium (ISLLC) standards (Council of Chief State School Officers [CCSSO], 2008). The "professional standards define the nature and quality of work of . . . educational leaders" (NPBEA, 2015, p. 2) and were created with input from extensive research, surveys, focus groups, and comments from the public. Member organizations² of the NPBEA (the National Association of Elementary School Principals, the National Association of Secondary School Principals, and the American Association of School Administrators) were intricately involved in the creation of the PSEL, along with public feedback on two drafts. The 2015 standards are "designed to ensure that educational leaders are ready to meet effectively the challenges and opportunities of the job today and in the future as education, schools and society continue to transform" (NPBEA, 2015, p. 1).

The standards apply to building-level school leaders (e.g., principals) as well as systems-level school leaders (e.g., superintendents) and have "a stronger, clearer emphasis on students and student learning" (NPBEA, 2015, p. 2) than the previous version. The 10 standards reflect "domains, qualities, and values of leadership work that research and practice indicate contribute to students' academic success and well-being" (NPBEA, 2015, p. 8). Each standard is described by a standard statement and is further delineated by elements, 83 in total. Collectively, the standards and supporting elements represent the PSEL. The titles of the standards and the overall structure of PSEL are outlined in Table 1.

During the development of the PASL assessment, the 2008 ISLLC standards (CCSSO, 2008) were being revised. As previously described, the process of updating the national standards incorporated two drafts that were available for public comment. Once the assessment was completed, ETS test developers mapped the alignment of the assessment to the most recent version of the standards at that time, which were a draft (CCSSO, 2014). Those draft standards have since been revised, restructured, and ultimately finalized to become the 2015 PSEL standards (NPBEA, 2015). An alignment study was conducted so that the alignment of the test to the final version of the standards could be supported with evidence and publicly documented on test-related materials.

Table 1 Professional Standards for Educational Leaders Standards Structure

Standards number and title	No. elements		
1. Mission, Vision, and Core Values	7		
2. Ethics and Professional Norms	6		
3. Equity and Cultural Responsiveness	8		
4. Curriculum, Instruction, and Assessment	7		
5. Community of Care and Support for Students	6		
6. Professional Capacity of School Personnel	9		
7. Professional Community for Teachers and Staff	8		
8. Meaningful Engagement of Families and Community	10		
9. Operations and Management	12		
10. School Improvement	10		

Overview of Alignment

Alignment is a judgment-based process that requires input from a diverse panel of experts. Alignment panelists evaluate the degree to which an assessment measures a set of standards. Alignment studies have been conducted using a variety of methodologies for student assessments (Martone & Sireci, 2009). For licensure assessments, these methodologies have also been adopted (e.g., Reese, Tannenbaum, & Kuku, 2015). Although there are a variety of ways in which alignment studies can be conducted (e.g., Davis-Becker & Buckendahl, 2013; Martone & Sireci, 2009; Webb, 2007), a description of the methods used in those studies is beyond the scope of this research report. More relevant to this study, and to the use of alignment for licensure assessment, is that they typically involve

- 1. convening a panel of experts with knowledge of the content assessed and the test-taking population,
- 2. providing the panel with introductory information about the purpose of the study,
- 3. ensuring that panelists have a full understanding of the assessment and the standards,
- 4. providing training before the panelists make their alignment judgments, and
- 5. evaluating the process.

Furthermore, when implementing an alignment study, the researchers need to minimize threats to validity when incorporating each of these steps into the design of the study.

The distance-based methods used in this study incorporated those major components described by alignment researchers. This research report documents each step in the process as well as the data from the panelists' judgments and evaluations.

Distance-based methods, such as e-mailing recruitment letters, conducting meetings via conferencing software, and using web-based surveys to collect experts' judgments, have long been used for studies supporting test validity, though primarily through the use of web surveys for job analyses (e.g., Swiggett, Tannenbaum, Wagner, & Wolcott, 2010; Tannenbaum & Robustelli, 2008). In more recent years, standard-setting studies have been conducted using distance-based methods without adversely impacting the resulting data (e.g., Katz & Tannenbaum, 2014; Katz, Tannenbaum, & Kannan, 2009). Using distance-based methods for alignment studies, though not as prevalent, can also provide meaningful data supporting the content validity of assessments (Tannenbaum, 2011). The structure of this assessment provided an opportunity to utilize distance-based methods. As was previously mentioned, all of the test materials and the standards are publicly accessible on the ETS website (ETS, 2018).

Methods

Panel of Experts

The size of alignment panels tends to be small, typically five to eight panelists (Davis-Becker & Buckendahl, 2013; Webb, 2007). The main criteria are that the panel be knowledgeable of the content and the testing population, diverse enough to represent the field, of an appropriate size to indicate a clear majority in judgment, and manageable by the panel facilitator (Davis-Becker & Buckendahl, 2013). So the goal of recruitment was to obtain a small but diverse panel of experts. Ten panelists were selected to have judgments from at least six educators by the conclusion of the study, taking attrition into

Process for this Study 1. Preparation email Full information on the test 2. Webinar with ETS Assessment Specialists In-depth review of the Tasks and Steps Example materials presented 3. Pre-alignment email Training presentation with link to survey 4. Alignment Judgments Survey Judge which PSEL standards are being assessed Final Evaluation Survey MEASURING WHAT MATTERS

Figure 1 Description of the process for the alignment study provided to panelists in advance of the start of the study. This slide was part of a narrated presentation.

account. During recruitment, emphasis was placed on having a diverse panel of school leaders with expertise with the content knowledge.

Education agencies from multiple states were asked to nominate educators who have familiarity with the knowledge and skills required of beginning school leaders and experience as school leaders or as college faculty who prepare school leaders. Ten panelists for this study were selected from a pool of nominated educators. Those nominated for the alignment study were asked to complete a background information survey composed of demographic questions and questions about their professional experience. It was important that panelists represent diverse demographic backgrounds. In addition to background information, panelists were asked to indicate their availability to attend a webinar, during which they would receive detailed information about the assessment. They selected from three possible dates, and their availability determined the date for the webinar. After selection, panelists were informed that they would receive a \$200 honorarium for completing the entire study. Partial payments were not offered for partial completion.

Understanding the Assessment and the Standards

Introductory Information (Preparation E-Mail)

During an alignment study, it is important that the panelist begin with an orientation of the process and a description of the purpose of the study, the assessment, and the standards (Davis-Becker & Buckendahl, 2013). Panelists were emailed a letter describing the purpose of the alignment study. The letter also included attached documents describing the PASL task requirements and scoring rubrics, a link to the standards, and a recorded PowerPoint presentation.³ The presentation described the purpose of the alignment, an overview of the structure and purpose of the assessment, an overview of the standards, the criteria that were used to selected panelists, and the steps in the alignment process (see Figure 1).

Panelists were given approximately 2 weeks to review the PASL and PSEL materials in advance of the webinar that was to be presented by the assessment specialists. A note-taking worksheet, which asked panelists to focus on what is being measured by the tasks, was provided to assist the panelists with their premeeting review of the materials. The panelists were also asked to read, sign, and return a nondisclosure agreement.⁴

Understanding the Assessment (Webinar)

A webinar was provided by ETS assessment specialists to provide an in-depth review of the assessment—the guiding prompts, candidates' written responses, artifacts, and scoring rubrics. The purpose of this review was for the panelists to gain a full understanding of the assessment, what candidates need to do to respond to the guiding prompts within the tasks, and how candidates are evaluated. During this review, the assessment specialists discussed the step-specific

rubrics with the panel, the nature of the written responses that candidates are required to provide, how the artifacts support candidates' responses, and the evidence valued during scoring. During the webinar, panelists had the opportunity to have their questions answered. The assessment specialists provided the panel with the PowerPoint used during the webinar, and the webinar was audio-recorded. These resources were made available for those who were not able to attend the entire webinar and also for those who wished to review what was discussed. The assessment specialists' contact information was also provided.

Alignment Training and Judgments

Alignment Judgment Training

After the webinar, an e-mail was sent to the panelists with information about the alignment training and judgments. The training was provided using a second recorded PowerPoint presentation. It provided the panelists with instructions on what they should be considering as they made their alignment judgments. It described the layout of the alignment judgments survey and concluded with a link to the survey. The script of the spoken narration was also included in the PowerPoint.

The presentation described the structure of the alignment survey, including a description of how the PASL tasks and the PSEL standards would be presented to them. In the presentation, panelists were encouraged to have their resources (i.e., task requirements, rubrics, standards) available while they were completing their alignment judgments. They were also encouraged to take breaks. The panelists were sent the link to the alignment judgments survey at the conclusion of the training presentation (and again in reminder e-mails). The panel was given more than 2 weeks to complete their judgments⁵ and were reminded that they could contact the researcher if they had any questions.

Data Collection Surveys

To facilitate a distance-based alignment study, three surveys were used. The first survey collected background information during recruitment, as previously described, and the results describe the demographics of the panelists. The second, an alignment judgments survey, collected the panelists' independent judgments about whether each of the three tasks measured the PSEL standards and elements. The third survey was a final evaluation survey, which is described in the evaluation section of this report.

The alignment judgments survey contained four parts. The first part of the survey was introductory text reminding the panelists to have their resources available and to use the "save and continue later" option built into the survey software, as shown in Figure 2. The second part of the survey is shown in Figure 3; it allowed the panelists to indicate whether they attended the webinar (or reviewed the information), reviewed the training, and were ready to proceed. If a panelist indicated "not yet" to either of the two questions on this part of the survey, the panelist was presented with additional text reminding him or her to complete the previous steps and to contact the researcher before continuing. The panelist was also presented with the same text if he or she indicated "yes and I have additional questions" about the judgment training.

The third part of the survey asked panelists for their names (for tracking purposes), and the fourth part of the survey contained the alignment judgment questions.

Alignment Judgments

To make their alignment judgments, the panelists were asked first to consider all four of the steps that make up the task. The instructions and questions for Task 1 and Standard 1 are shown in Figures 4 and 5. For each task, the survey lists the task title and the titles of the four steps. The training presentation informs the panelists that they need to refer to their resources for more details about the tasks and steps.

The first judgment panelists were asked to make was whether they believe *any part* of Task 1 is assessing the knowledge and skills described in *any part* of PSEL Standard 1. Therefore they must consider all of PSEL Standard 1, including its supporting elements. On the survey, the *standard statement* was listed, which summarized the standard. The first judgment

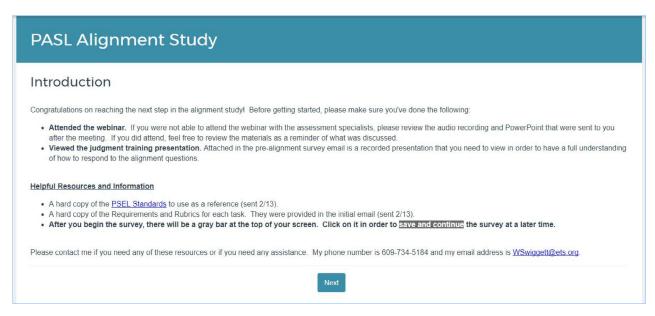


Figure 2 Introductory text to the alignment judgments survey.

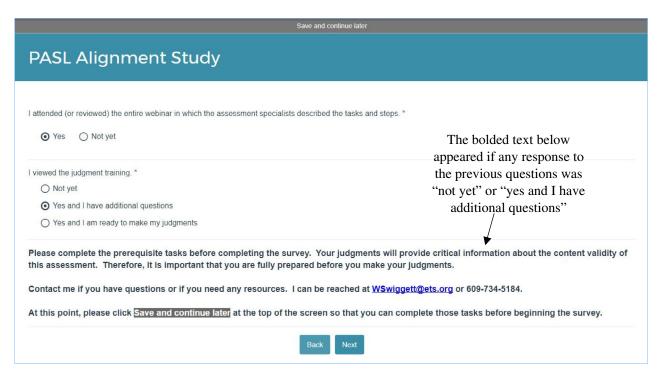


Figure 3 Panelists' confirmation of their readiness to proceed with their alignment judgments.

was a yes or no question. If panelists selected "yes," they were asked to make additional judgments. New questions appeared asking them to judge which elements of PSEL Standard 1 are measured by PASL Task 1. If, however, they answered "no" to the first judgment about Standard 1, they moved on to the next question, regarding the next standard (i.e., they were asked if any part of PASL Task 1 is assessing PSEL Standard 2).

For Task 1, this process was repeated for each of the 10 PSEL standards and supporting elements. After completing these judgments for PASL Task 1, the panelists continued on to PASL Task 2 and PSEL Standard 1, following the same process. In addition to the alignment questions, the panelists were provided with text boxes after each standard, within which they could make optional comments about that task and standard.

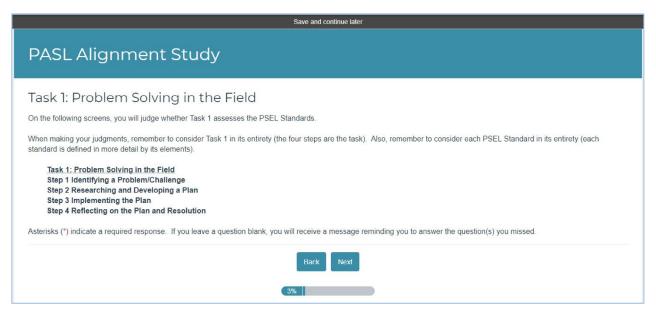


Figure 4 Alignment judgments — Training reminder to holistically consider the task.

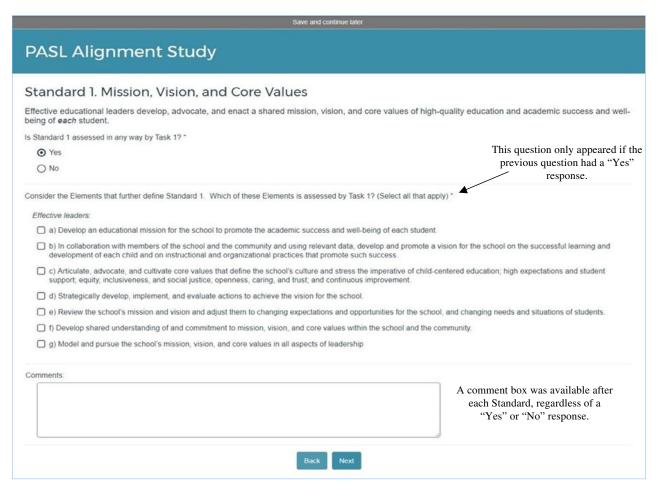


Figure 5 Alignment judgment questions for a task, beginning with the Professional Standards for Educational Leaders standard, followed by elements of that standard. An optional comment box was available after judgments for each standard.

Evaluating the Process

The panelists were sent the link to the final evaluation survey after they completed all of their alignment judgments. The questions on the final evaluation survey addressed the quality of the instructions and supporting information provided. A separate set of questions was asked about the communication and materials supplied during each stage in the process (e.g., preparatory information, webinar information, alignment training judgments). The participants were also asked to indicate whether they understood the purpose of the study, whether they understood the PASL and PSEL enough to comfortably make their judgments, and their opinions of the process of the distance-based study. These questions were designed to elicit evidence of the validity of the alignment process and the reasonableness of the panelists' judgments (Davis-Becker & Buckendahl, 2013; Hambleton & Pitoniak, 2006; Kane, 2001; Papageorgiou & Tannenbaum, 2016).

Results

Panel of Experts

As a distance-based study, retention is a major concern. Alignment panels do not need to be large (Davis-Becker & Buckendahl, 2013; Webb, 2007), but, as opposed to a face-to-face study, panelists can leave the study at any time and without notice. To encourage retention and the completion of each part of the alignment study, reminders were sent for each step in the process that required the participants to complete a task. Of the 10 selected panelists, one did not return the nondisclosure agreement, and another did not complete the alignment judgments. As a result, eight subject-matter experts from five states and the Virgin Islands completed the study.

For an alignment study to produce credible, valid results, the expert judgments must come from panelists who represent the diversity in the field. As such, the background information of the panel must be documented (Martone & Sireci, 2009). Three of the panelists were college faculty, including a director of teacher education. One panelist was a professional development faculty member of a national organization. Three additional panelists were principals or vice principals, and one panelist was a superintendent. Seven of the panelists indicated that they were currently involved in training or preparing school leaders. The background information of the panelists is summarized in Table 2. The appendix lists their names and affiliations.

Alignment Judgments

Criteria for determining *agreement* among the panelists vary in the research literature (Davis-Becker & Buckendahl, 2013). In the design of the study, how panelists' judgments are calculated determines what agreement means. During face-to-face studies, panelists have the opportunity to review the first round of data and discuss their judgments. After this activity, the data from the subsequent round or rounds of judgments can be based on consensus or on a predetermined decision rule. The design of this study did not include discussions or subsequent rounds of judgments. Therefore agreement was determined by a decision rule.

Utilizing a decision rule was an efficient way to analyze alignment judgments collected in a distance-based study. Panelists were able to make independent judgments, and without a requirement to reach consensus, group discussions were not required. Using a decision rule is consistent with other alignment studies (Davis-Becker & Buckendahl, 2013; Reese et al., 2015). Research has suggested that independent judgments produce similar results compared to studies in which panelists discuss their judgments and reach consensus (Chin, Rodeck, Buckendahl, & Foley, as cited in Davis-Becker & Buckendahl, 2013). For this study, the decision rule required that two-thirds of panelists (five out of eight panelists) agreed that a task measured a specific standard or element. Table 3 lists the judgments on which the required number of panelists agreed.

There are a total of 10 standards and 83 elements, and for each task, we report on the number of standards directly measured by the task and the number of elements associated with those particular standards that are directly measured by the task. Additionally, the comments collected by the survey provide insight into the consistency of panelists' judgments and the rationales behind their decisions. Therefore, in addition to the alignment data, themes in the comments are also a part of the results of the study.

For Task 1, problem solving in the field, panelists holistically judged that the task assessed all of the 10 PSEL standards and 32 of the 83 associated elements. Many of the comments written by the panelists described that, depending on the

Table 2 Panelists' Background Information

Characteristic	N
Current position	
Principal or vice principal	3
Superintendent	1
College faculty	3
Professional development faculty	1
Gender	
Female	5
Male	3
Race/ethnicity	
White	5
Black/African American	3
Certified as a school leader in your state or territory	
Yes	6
No	2
Years of experience as a school leader	
≤3	1
4-7	1
8–11	2
12-15	1
≥16	3
Are you currently involved in the training or preparation of school leaders?	
Yes	7
No	1
Years of experience preparing school leaders	
≤3	1
4-7	2
8–11	1
12–15	1
≥16	3

problem chosen and the plan developed by the candidate, more elements could be selected. For example, a panelist wrote, "Element [7f]⁷ is not checked but may also be included depending on the identified problem, but not in every identified problem." Additionally, panelists clarified that Task 1 does not specifically address what was described in some of the elements that they did not select (e.g., "Task 1 doesn't necessarily place the candidate in the community [8d] or in a direct advocacy role [8i and 8j]").

Panelists judged that for Task 2, supporting continuous professional development, 7 of the PSEL standards and 26 of the 55 associated elements were being assessed. Similar to Task 1, comments made by the panelists mentioned that some elements were not directly assessed but that candidates' choices about the professional development (PD) could relate to a topic described in unselected elements (e.g., "unless the PD is about improving family engagement" [Standard 8]). Additionally, one panelist explained that some elements in Standard 9 were not directly assessed but were implied. Those elements were not judged as aligned by the panelist, in accordance with the alignment judgment training.

For Task 3, creating a collaborative team, panelists judged that 9 of the standards and 42 of the 73 associated elements were being assessed. Panelists noted a direct relationship in how this task measures some of the standards. For example, for Standard 1, a panelist noted, "Building a collaborative team would have a strong focus on this standard," and for Standard 3, a panelist wrote, "These elements, I believe, will be assessed by the candidate's work to build a collaborate [*sic*] team to improve instruction, student achievement, and the school culture." As with the other tasks, the panelists wrote about choices candidates could make that may relate to additional elements. For example, a participant wrote, "While [6a] and [6b] will also improve school culture, they may not be directly assessed by the steps of the task."

As a whole, the PASL was judged to assess each of the 10 PSEL standards. Every element from Standards 2, 7, and 10 was judged to be assessed by PASL. At least two-thirds of the elements from each of Standards 1, 4, 5, and 6 were judged to be assessed by PASL. Overall, the PASL was judged to assess 61% (51 out of the 83 elements) of the PSEL. Because panelists were asked to judge only those standards and elements that are directly measured, they did not select those additional standards and elements that they commented about.

Table 3 Alignment Study Judgments

	N	0.	
PASL task	Standards	Elements	Standards (elements)
Task 1	10	32	1(b), 1(d),
			2(a), 2(b), 2(c), 2(e),
			3(a), 3(c), 3(g),
			4(a), 4(b), 4(d), 4(f), 4(g),
			5(a), 5(c), 5(d),
			6(d),
			7(c), 7(e),
			8(c), 8(f),
			9(g),
			10(a), 10(b), 10(c), 10(d), 10(e), 10(f), 10(g), 10(h), 10(i)
Task 2	7	26	1(b), 1(d),
			2(a), 2(b), 2(e),
			3(c),
			4(c), 4(d),
			6(c), 6(d), 6(e), 6(f), 6(i),
			7(a), 7(b), 7(c), 7(e), 7(f), 7(g), 7(h),
			10(a), 10(b), 10(d), 10(e), 10(f), 10(j)
Task 3	9	42	1(b), 1(c), 1(d), 1(f), 1(g),
			2(a), 2(b), 2(c), 2(d), 2(e), 2(f),
			3(g),
			4(a), 4(c), 4(d), 4(f), 4(g),
			5(a), 5(b),
			6(d), 6(f), 6(g), 6(i),
			7(a), $7(b)$, $7(c)$, $7(d)$, $7(e)$, $7(f)$, $7(g)$, $7(h)$,
			9(g),
0 110	4.0		10(a), 10(b), 10(c), 10(d), 10(e), 10(f), 10(g), 10(h), 10(i), 10(j)
Overalla	10	51	1(b), 1(c), 1(d), 1(f), 1(g),
			2(a), 2(b), 2(c), 2(d), 2(e), 2(f),
			3(a), 3(c), 3(g),
			4(a), 4(b), 4(c), 4(d), 4(f), 4(g),
			5(a), 5(b), 5(c), 5(d),
			6(c), 6(d), 6(e), 6(f), 6(g), 6(i),
			7(a), 7(b), 7(c), 7(d), 7(e), 7(f), 7(g), 7(h),
			8(c), 8(f),
			9(g),
			10(a), 10(b), 10(c), 10(d), 10(e), 10(f), 10(g), 10(h), 10(i), 10(j)

Note. PASL = Performance Assessment for School Leaders.

Panelists made comments suggesting that there may be additional elements measured by PASL, if a candidate selects artifacts that relate to them. Though many of the comments were similar, they cannot be accepted as evidence of alignment. The rubric is broad enough to cover several situations/activities a candidate may select. The alignment of the tasks to the standards must be based on what is directly measured. For example, Task 2 focuses on supporting continuous PD. If a candidate selected "improving family engagement" as the PD for Task 2, the score the candidate earned would not be addressing "Meaningful Engagement of Families and Community" (Standard 8). The task is addressing only what is explicitly stated in the task requirement and rubric. In this example, the panel judged that Standard 7, "Professional Community for Teachers and Staff," is directly measured by Task 2. This is appropriate because the task requirement and rubrics for Task 2 focus on PD, not improving family engagement.

Final Evaluation

Procedural evidence is often documented through the use of panelists' responses to study evaluations (Cizek, 2012; Cizek & Bunch, 2007). After the panelists completed their alignment judgments, they completed a final evaluation survey assessing the different components of the distance-based study. Overall, their answers addressed (a) if they understood the

^aThere is a total of 83 elements in all of the 10 Professional Standards for Educational Leaders.

Table 4 Final Evaluation: Initial Communications

Statement	Strongly agree	Agree	Disagree	Strongly disagree
I understood the purpose of the study.	6	2	0	0
The alignment overview PowerPoint presentation provided a	4	4	0	0
clear description of the study.				
The preparation e-mail with attached resources provided	5	3	0	0
enough information for me to review the PASL and PSEL				
prior to the webinar with the assessment specialists. The task requirements and rubrics provided were thorough	4	4	0	0
enough for me to understand the PASL.				
I had enough time to review the PASL and PSEL standards	5	3	0	0
before meeting with the assessment specialists.				
Completing the attached worksheet helped me to fully consider	1	7	0	0
how a prospective school leader would respond to the PASL.				

Note. PASL = Performance Assessment for School Leaders. PSEL = Professional Standards for Educational Leaders.

purpose of the study, (b) if instructions and explanation provided were clear, (c) if they were adequately trained, and (d) if the process was easy to follow. All the panelists strongly agreed or agreed that they understood the purpose and that the materials used to provide explanations were clear. All the panelists strongly agreed or agreed that they were adequately trained and that the process was easy to follow. Overall, the data from the evaluations confirmed that the implementation of the study was consistent with its design, from the panelists' perspectives.

It is critical for the panelists to understand the materials used and the information presented throughout the study. Therefore the first part of the final evaluation asked about the initial communications and materials that the panelists received before the first webinar. Table 4 summarizes the panelists' responses. In relation to the communications and supplemental materials, all of the panelists strongly agreed or agreed that they understood the PASL task requirements and rubrics. Panelists were also asked how well they understood the PSEL standards prior to the study. On a scale of 1 (very little) to 5 (full understanding), all of the panelists' ratings were between 3 and 5, as shown in Figure 6.

The final evaluation also asked panelists to provide feedback about connecting to and attending the webinar (see Table 5). Related questions about the instructions on connecting to the webinar as well as the postwebinar resources were also included in the final evaluation. Although one panelist was unable to attend the webinar and another attended late, they all strongly agreed or agreed that the webinar with the assessment specialists helped them to better understand the PASL and that the postwebinar resources were useful.

It was important that the final evaluation document how well the panel believed that the recorded presentation trained them in making their judgments. Although the alignment judgments survey reminded the panelists to complete the training and to review the materials and the webinar resources, the software did not prohibit the panelists from continuing if they did not complete these tasks. Table 6 shows that all of the panelists indicated on the final evaluation survey that they strongly agreed or agreed that the presentation clearly prepared them to make their judgments. Additionally, all of the panelists agreed that they were confident in the judgments that they made.

At the time panelists responded to the alignment judgments survey, they were given contact information in case they encountered difficulties. Therefore panelists who encountered technical difficulties were able to have them successfully resolved (through phone calls and e-mails) so that they could continue making judgments. Table 7 shows that approximately half of the panelists encountered technical difficulties at some point while completing the alignment judgments survey; however, all difficulties were successfully resolved. The types of difficulties that were experienced required ETS staff to resend panelists' links to their responses so that they could continue their surveys, instead of starting over. These problems arose from being disconnected from the Internet or accidentally closing the browser window or from a panelist's

How well did you	understand	the PSEL s	tandards pri	or to the stu	dy?	
	1	2	3	4	5	
Very little	0	0	1	5	2	Full understanding

Figure 6 Final evaluation: Prior understanding of Professional Standards for Educational Leaders.

Table 5 Final Evaluation: Webinar

Statement	Strongly agree	Agree	Disagree	Strongly disagree
The pre-meeting e-mail provided me with enough information to connect to the webinar.	4	3	1	0
The meeting helped me to better understand the PASL.	4	4	0	0
Receiving the PowerPoint presentation and recording was useful.	5	3	0	0
When did you read the pre-meeting e-mail?			N	
I didn't read the e-mail.			0	
At the time of the meeting.				
At least 30 minutes prior to the meeting.			0	
At least 1 day before the meeting.			8	
When did you first log into the Skype meeting?			N	
I did not log in/unable to attend			1	
Before the time of the meeting			5	
At the time of the meeting			1	
After the meeting started			1	

Note. Panelists were encouraged to log into the meeting in advance to ensure that all necessary software was installed. PASL = Performance Assessment for School Leaders.

Table 6 Final Evaluation: Alignment Judgments

Statement	Strongly agree	Agree	Disagree	Strongly disagree
The PASL alignment training presentation clearly prepared me to	2	6	0	0
make my alignment judgments.				
I understood the PASL tasks/steps well enough to make my judgments.	4	4	0	0
I understood the rubrics well enough to make my PASL judgments.	4	4	0	0
I understood the PSEL standards well enough to make my judgments.	2	6	0	0
I am confident in the judgments that I made for the alignment study.	0	8	0	0

Note. PASL = Performance Assessment for School Leaders. PSEL = Professional Standards for Educational Leaders.

Table 7 Final Evaluation: Alignment Judgments Survey

	Yes	No
Did you encounter any difficulties completing the survey?	3	5

desire to change his or her responses after submitting the survey. For example, one panelist began the survey more than once (due to connectivity issues). While on the phone with ETS staff, she was connected to the survey she wanted to complete. She confirmed it was the survey with the responses she wanted recorded and that the ETS staff could delete the other partially completed surveys.

Table 8 describes how the panelists perceived the overall distance-based study. All panelists rated the process at the higher ends of the efficiency and coordination scales. The same was true for the understandability scale, with the exception of one panelist, who provided a rating of 3 out of 5.

Summary and Discussion

The PASL was designed to be "an evidence-based performance assessment designed to assess instructional leadership during a candidate's clinical experience prior to their receiving a license" (ETS, 2017, p. 3). This alignment study was conducted to support the content validity of the assessment. Specifically, the results provided support for the research question, to what degree is the test measuring the PSEL? Panelists judged whether the PASL is assessing the PSEL standards, which define what is important for school leaders to know and be able to do. The panelists' judgments indicated which PSEL

Table 8 Final Evaluation: Overall Process

	1	2	3	4	5	
Inefficient	0	0	0	6	2	Efficient
Uncoordinated	0	0	0	5	3	Coordinated
Confusing	0	0	1	5	2	Understandable

standards and elements they believed were being directly measured by the PASL. Additionally, comments supplied by the judges described how some aspects of the PSEL standards would be difficult to measure on this assessment and that, depending on the choices made by the candidates, the assessment could measure more of the supporting elements than were indicated by the panelists.

Alignment researchers have described five major elements that are an important part of any alignment study (Davis-Becker & Buckendahl, 2013; Martone & Sireci, 2009; Webb, 2007). The first is ensuring that the alignment panel is made up of subject-matter experts who would have experience with the content measured on the assessment, which was true for the eight participants of this study. Additionally, the majority of the panelists were involved in the preparation or training of school leaders and would be aware of what beginning school leaders know and can do.

As stated by Davis-Becker and Buckendahl (2013), there are no set guidelines regarding the size of the panel, but it is important for

the panel to be large enough to represent sufficient diversity among relevant stakeholder groups and have a clear majority in the case of some divergent panelists. However, the panel should not be too large that it cannot be managed by a panel leader or facilitator. (p. 28)

The eight-member panel was of a manageable size during this study and represented multiple perspectives. The two-thirds agreement decision rule allowed for a clear majority of judgments to be determined. In addition, the comments that accompanied the panelists' judgments were consistent in quality. Although the panelists represented various states and the U.S. Virgin Islands, the panel size was not large enough to claim representation across the country. However, the selected panelists represented different demographic backgrounds and had various levels of experience as a school leader and preparing school leaders. Additionally, the building-level school leaders worked in different regions and with students in different grade levels. These factors support the claim that the panel for this study was adequately diverse.

The other elements that are important for alignment studies provide procedural evidence, which verifies that the implementation of the study was consistent with its design. Specifically, the four elements have been described as providing introductory information about the purpose of the study, ensuring that panelists have a full understanding of the assessment and the standards, providing alignment judgment training, and evaluating the process (Davis-Becker & Buckendahl, 2013; Martone & Sireci, 2009; Webb, 2007). Although these elements were carried out using distance-based methods, the panelists' evaluation results document that they were able to understand the purpose of the study, the assessment, the standards, and the training. They were able to follow the entire alignment process. Additionally, the final evaluation survey results showed that panelists had generally positive opinions of the study.

The results of this study provide a description of the degree of alignment between the test and the standards. As stated, alignment studies can be conducted in a variety of ways. In a similar vein, the results can be reported and interpreted in a variety of ways. There are no criteria determining what level of alignment is acceptable (Davis-Becker & Buckendahl, 2013). The results of this study are descriptive, showing the panelists' judgments, based on two-thirds agreement. Because this test was designed to match to a draft version of the standards, the results of this study support the intended design of the assessment. The study results also provide evidence describing the content of the assessment that can be documented in the updated test materials.

The results of this alignment study will benefit educator licensing agencies by providing information supporting the claims of the assessment. By understanding the degree to which the PASL measures the knowledge and skills of the PSEL, these agencies can determine if using this assessment to license school leaders fits their goals. Additionally, if a state, district, or territory has established school leadership standards for their licensure process that can be mapped to the PSEL standards, they can make better informed decisions about the PASL assessment and its use in their state, district, or territory.

Future investigations of distance-based ways to conduct alignment studies should be expanded to assessments that are more traditionally structured (i.e., with predominantly selected-response items). The largest hurdle in designing such a study for those types of assessments would be the test security issues that would arise from providing panelists remote access to the test items. Another difficulty in conducting an alignment study for an assessment with a large number of items is that judgments would need to be made on each of those items. This could cause fatigue with the panelists that have an adverse effect on retention. Additionally, with a large number of items, additional types of alignment judgments can be made. The judgments for the PASL assessment focused on content coverage. Judgments about the content-specific cognitive complexity of the items was not possible due to the structure of the test. One reason is that content-specific cognitive levels do not currently exist for school leader content. The other is that it is reasonable to assume that, as a portfolio, with steps requiring the candidate to synthesize their work from practice with written responses and artifacts, the prompts promote more complex thinking (Darling-Hammond, 2017; Darling-Hammond & Snyder, 2000).

Investigations into ways to incorporate multiple rounds of judgments into distance-based studies would also be important. Because alignment panels tend to be small, facilitating the discussion would not be difficult for a facilitator. However, presenting the data and having the panelists engage in a discussion that fits into a single time frame, suitable for all panelists, is a problem. If all panelists are not available during the discussion, it would adversely affect the data from the subsequent round of judgments as well as the retention of the panelists. Additionally, if the panelists are expected to make consensus judgments, the discussions would be more time consuming.

Assessments are designed to measure a sample of a domain (generally represented by the standards). As a result, alignment studies do not provide a yes or no answer about alignment but rather information regarding the *degree* of alignment. Although there are a variety of ways in which alignment studies can be conducted, there are general practices that need to be included in the design of an alignment study. Alignment studies need to document the expertise of the panelists, the information provided about the assessment and standards, and the training provided. Additionally, the criteria defining panelist agreement must be determined in the study design and documented. Regardless of the methodology chosen by the researcher, evidence supporting the implementation of the study (i.e., the procedural evidence) must also be documented. The documentation of alignment studies should be comprehensive enough for stakeholders to determine if the data adequately meet their needs.

Notes

- 1 https://www.ets.org/ppa/test-takers/school-leaders/about
- 2 The member organizations not listed as PSEL authors are: American Association of Colleges of Teacher Education, Council for the Accreditation of Educator Preparation, CCSSO, National Council of Professors of Educational Administration, National School Boards Association, and University Council for Educational Administration.
- 3 The script of the presentation was provided in the notes section of the PowerPoint slides.
- 4 The nondisclosure agreement, hard-copies of the letter and attachments, and a CD of the presentation were also mailed to the participants, with a self-addressed overnight return envelope for the signed nondisclosure agreement.
- 5 The alignment judgments survey was available from March 1 17, 2017.
- 6 Panelists were also permitted to fax or email a scanned copy of the nondisclosure agreement.
- 7 Standards are indicated by numbers and the supporting elements are indicated by letters.

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Appendix

Panelists and Affiliation

Panelist	Affiliation
Shelly Albritton	University of Central Arkansas (AR)
Kirk Biggerstaff	Cumberland County Board of Education (KY)
Karis Clarke	Columbia College (SC)
Lynn Clayton-Prince	Powhatan County Public Schools (VA)
Thomas Evans	National Association of Secondary School Principals (VA)
Walter Hart	Winthrop University (SC)
Monique Jacob	Nathanael Greene Elementary School (RI)
Natasha O'Halloran-Smith	Alexander Henderson Elementary School (USVI)

Note. All of the panelists provided permission to be listed in this research report.

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